



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/866,920	05/30/2001	Toshihiko Iwakiri	OKI.239	5152

7590 06/27/2002

JONES VOLENTINE, PLLC
SUITE 150
12200 SUNRISE VALLEY DRIVE
RESTON, VA 20191

EXAMINER

CRUZ, LOURDES C

ART UNIT

PAPER NUMBER

2827

DATE MAILED: 06/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/866,920

Applicant(s)

IWAKIRI, TOSHIHIKO

Examiner

Lourdes C. Cruz

Art Unit

2827

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 May 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: See page 6, "stress absorbing portions" 20, "protruding portion" 21, "concave portion" 22. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 6,30,31,32. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: See page 3, lines 20+, notice that the last two sentences of this paragraph are contradictory to one another.

Appropriate correction is required.

Claim Objections

Claims 5,6,9, and 13 are objected to because of the following informalities:

Claim 5: the claim recites "inner lead". Does Applicant mean inner leads? The claim also recites, "each connect". Connects?

Claim 5 also recites "of said second portion". Does Applicant mean portions?

Claim 6: The claim recites, "which extend". Does Applicant mean extend?

Claim 9: The claim recites, "which is opposite..." Does Applicant mean on the opposite side?

Claim 13: The claim recites, "each support". Does Applicant mean supports?

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5, and 6-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recite "the other end" of respective second... and "the other end" of said third portion. Both these terms lack antecedent basis.

The claim also recites "to different direction from a direction of said...extended". The scope of the claim has been made unclear with this phrase.

Claim 6 recites, "the inner leads", this lacks antecedent basis.

Claim 9 recites, "which is an integrated circuit is formed". This phrase is very confusing to the examiner. It also recites, "which is opposite side" and "arranged over..."

chip". The scope of the claim has been rendered unclear, and the claim has been drafted to be confusing to the examiner.

Claim 10 recites "and die pad". Does applicant mean to refer to the already defined die pad, or does Applicant intend to define a second die pad?. The claim also recites "extended to different direction from directions...extended". This phrase is very confusing, making the scope of the claim indefinite.

Claim 11 recites, "disposes on the frame portion". The scope of this phrase is unclear; therefore, the claim is indefinite.

Claim 13 recites, "substantially corner portions of said frame portions". This phrase has been drafted to be grammatically incorrect. The examiner finds the claim indefinite for it is difficult to understand the claim. The claim also recites "at side portion". See that a frame portion has already been defined in claim 10. It is unclear whether this is referring to the frame portion or defining a new portion.

Regarding all the claims rejected above, due to the abundance of grammatical errors and the multiple indefinite phrases, the claims have been examined as best understood by the examiner. Find rejection below.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoo et al. (US 5661338).

Yoo et al. discloses a semiconductor device (See Fig. 2) comprising a die pad 3; a die pad supporter T which supports said die pad; a plurality of inner leads (wider part of 8) arranged to surround said die pad; and a semiconductor chip c which has a size larger in area than that of said die pad and which is mounted on said die pad; wherein said die pad supporter has a stress absorbing portion 4 which is located between said die pad and said inner leads, and wherein said semiconductor chip is disposed over the stress absorbing portion.

Yoo et al. also discloses a device wherein:


- Said stress absorbing portion includes a bent portion (sides around 5) in a direction different in which the die pad supporter extends
- A hole 5 in the stress absorbing portion
- Chip adhered to the pad
- See that 5 makes a rectangular shape
- The rectangular frame included in a frame portion with multiple portions wherein each second portions are parallel with said inner leads
- Portions extending in four different directions
- See that the prior art discloses more than 1 T
- A chip disposed on the frame portion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lourdes C. Cruz whose telephone number is 703-306-5691. The examiner can normally be reached on M-F 10:00- 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Talbott can be reached on 703-305-9883. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Lourdes C. Cruz
Examiner
Art Unit 2827



Lourdes Cruz
June 20, 2002



JEROME JACKSON
PRIMARY EXAMINER
GROUP 2500